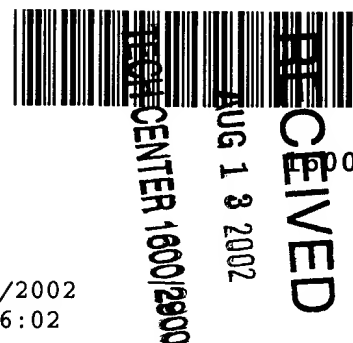


#12



RAW SEQUENCE LISTING

DATE: 08/07/2002

PATENT APPLICATION: US/09/902,572A

TIME: 13:06:02

Input Set : A:\CORRECTED SEQUENCE LISTING FROM GNE.P1618P2C40.txt

Output Set: N:\CRF4\08072002\I902572A.raw

3 <110> APPLICANT: Genentech, Inc.
 4 Ashkenazi, Avi
 5 Botstein, David
 6 Desnoyers, Luc
 7 Eaton, Dan L.
 8 Ferrara, Napoleone
 9 Filvaroff, Ellen
 10 Fong, Sherman
 11 Gao, Wei-Qiang
 12 Gerber, Hanspeter
 13 Gerritsen, Mary E.
 14 Goddard, A.
 15 Godowski, Paul J.
 16 Grimaldi, Christopher J.
 17 Gurney, Austin L.
 18 Hillan, Kenneth, J.
 19 Kljavin, Ivar J.
 20 Mather, Jennie P.
 21 Pan, James
 22 Paoni, Nicholas F.
 23 Roy, Margaret Ann
 24 Stewart, Timothy A.
 25 Tumas, Daniel
 26 Williams, P. Mickey
 27 Wood, William, I.
 29 <120> TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 30 Acids Encoding the Same
 32 <130> FILE REFERENCE: 10466-14
 34 <140> CURRENT APPLICATION NUMBER: 09/902,572A
 35 <141> CURRENT FILING DATE: 2001-07-10
 37 <150> PRIOR APPLICATION NUMBER: PCT/US00/04414
 38 <151> PRIOR FILING DATE: 2000-02-22
 40 <150> PRIOR APPLICATION NUMBER: US 60/143,048
 41 <151> PRIOR FILING DATE: 1999-07-07
 43 <150> PRIOR APPLICATION NUMBER: US 60/145,698
 44 <151> PRIOR FILING DATE: 1999-07-26
 46 <150> PRIOR APPLICATION NUMBER: US 60/146,222
 47 <151> PRIOR FILING DATE: 1999-07-28
 49 <150> PRIOR APPLICATION NUMBER: PCT/US99/20594
 50 <151> PRIOR FILING DATE: 1999-09-08
 52 <150> PRIOR APPLICATION NUMBER: PCT/US99/20944
 53 <151> PRIOR FILING DATE: 1999-09-13
 55 <150> PRIOR APPLICATION NUMBER: PCT/US99/21090

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/902,572A

DATE: 08/07/2002

TIME: 13:06:02

Input Set : A:\CORRECTED SEQUENCE LISTING FROM GNE.P1618P2C40.txt

Output Set: N:\CRF4\08072002\I902572A.raw

56 <151> PRIOR FILING DATE: 1999-09-15
58 <150> PRIOR APPLICATION NUMBER: PCT/US99/21547
59 <151> PRIOR FILING DATE: 1999-09-15
61 <150> PRIOR APPLICATION NUMBER: PCT/US99/23089
62 <151> PRIOR FILING DATE: 1999-10-05
64 <150> PRIOR APPLICATION NUMBER: PCT/US99/28214
65 <151> PRIOR FILING DATE: 1999-11-29
67 <150> PRIOR APPLICATION NUMBER: PCT/US99/28313
68 <151> PRIOR FILING DATE: 1999-11-30
70 <150> PRIOR APPLICATION NUMBER: PCT/US99/28564
71 <151> PRIOR FILING DATE: 1999-12-02
73 <150> PRIOR APPLICATION NUMBER: PCT/US99/28565
74 <151> PRIOR FILING DATE: 1999-12-02
76 <150> PRIOR APPLICATION NUMBER: PCT/US99/30095
77 <151> PRIOR FILING DATE: 1999-12-16
79 <150> PRIOR APPLICATION NUMBER: PCT/US99/30911
80 <151> PRIOR FILING DATE: 1999-12-20
82 <150> PRIOR APPLICATION NUMBER: PCT/US99/30999
83 <151> PRIOR FILING DATE: 1999-12-20
84 <150> PRIOR APPLICATION NUMBER: PCT/US00/00219
85 <151> PRIOR FILING DATE: 2000-01-05
87 <160> NUMBER OF SEQ ID NOS: 423
90 <210> SEQ ID NO: 1
91 <211> LENGTH: 1825
92 <212> TYPE: DNA
93 <213> ORGANISM: Homo sapiens
95 <400> SEQUENCE: 1
96 actgcacctc ggttctatcg attgaattcc ccggggatcc tctagagatc cctcgacctc 60
97 gacccacgcg tccgggccgg agcagcacgg ccgcaggacc tggagctccg gctgcgtctt 120
98 cccgcagcgc taccgcgat gcgcctgccg cgccgggccg cgctggggct cctgccgctt 180
99 ctgctgctgc tgccgcccgc gccggaggcc gccaaagaag cgacgcccctg ccaccgggtgc 240
100 cgggggctgg tggacaagtt taaccagggg atggtggaca ccgcaaagaa gaactttggc 300
101 ggcggaaca cggcttggga ggaaaagacg ctgtccaagt acgagtccag cgagattcgc 360
102 ctgctggaga tcctggaggg gctgtgcgag agcagcgact tcgaatgcaa tcagatgcta 420
103 gaggcgcagg aggagcacct ggaggcctgg tggtgcagc tgaagagcga atatacctgac 480
104 ttattcgagt ggttttgtgt gaagacactg aaagtgtgct gctctccagg aacctacggt 540
105 cccgactgtc tcgcatgcca gggcggatcc cagaggccct gcagcgggaa tggccactgc 600
106 agcggagatg ggagcagaca gggcgacggg tctgcccgt gccacatggg gtaccagggc 660
107 ccgtgtgca ctgactgcat ggacggctac ttcagctcgc tccggaacga gaccacagc 720
108 atctgcacag cctgtgacga gtcctgcaag acgtgctcgg gcttgaccaa cagagactgc 780
109 ggcgagtgtg aagtgggctg ggtgctggac gagggcgct gtgtggatgt ggacgagtgt 840
110 gcggccgagc cgcctccctg cagcgtgcg cagttctgta agaacgccaa cggctcctac 900
111 acgtgcgaag agtgtgactc cagctgtgtg ggctgcacag ggggaaggccc aggaaactgt 960
112 aaagagtgtg tctctggcta cgcgaggagg caccggacagt gtgcagatgt ggacgagtgc 1020
113 tactagcag aaaaaacctg tgtgaggaaa aacgaaaact gctacaatac tccagggagc 1080
114 tacgtctgtg tgtgtcctga cggcttcgaa gaaacggaag atgcctgtgt gccgccggca 1140
115 gaggtgaag ccacagaagg agaaagccc acacagctgc cctcccgcga agacctgtaa 1200
116 tgtgccggac ttacccttta aattattcag aaggatgtcc cgtggaaaat gtggccctga 1260
117 ggatgccgtc tcctgcagtg gacagcggcg gggagaggct gcctgctctc taacggttga 1320

RAW SEQUENCE LISTING

DATE: 08/07/2002

PATENT APPLICATION: US/09/902,572A

TIME: 13:06:02

Input Set : A:\CORRECTED SEQUENCE LISTING FROM GNE.P1618P2C40.txt

Output Set: N:\CRF4\08072002\I902572A.raw

```

118 ttctcatttg tcccttaaac agctgcattt cttggttggt cttaaacaga cttgtatatt 1380
119 ttgatacagt tctttgtaat aaaattgacc attgtaggta atcaggagga aaaaaaaaaa 1440
120 aaaaaaaaaa aaagggcggc cgcgactcta gagtcgacct gcagaagctt ggccgccatg 1500
121 gcccaacttg tttattgcag cttataatgg ttacaaataa agcaatagca tcacaaattt 1560
122 cacaaataaa gcattttttt cactgcattc tagttgtggt ttgtccaaac tcatcaatgt 1620
123 atcttatcat gtctggatcg ggaattaatt cggcgcagca ccatggcctg aaataacctc 1680
124 tgaaagagga acttggttag gtaccttctg aggcggaaag aaccagctgt ggaatgtgtg 1740
125 tcagttaggg tgtggaaagt ccccaggctc cccagcaggc agaagtatgc aagcatgcat 1800
126 ctcaattagt cagcaaccca gttttt 1825
128 <210> SEQ ID NO: 2
129 <211> LENGTH: 353
130 <212> TYPE: PRT
131 <213> ORGANISM: Homo sapiens
133 <400> SEQUENCE: 2
134 Met Arg Leu Pro Arg Arg Ala Ala Leu Gly Leu Leu Pro Leu Leu Leu
135 1 5 10 15
137 Leu Leu Pro Pro Ala Pro Glu Ala Ala Lys Lys Pro Thr Pro Cys His
138 20 25 30
140 Arg Cys Arg Gly Leu Val Asp Lys Phe Asn Gln Gly Met Val Asp Thr
141 35 40 45
143 Ala Lys Lys Asn Phe Gly Gly Gly Asn Thr Ala Trp Glu Glu Lys Thr
144 50 55 60
146 Leu Ser Lys Tyr Glu Ser Ser Glu Ile Arg Leu Leu Glu Ile Leu Glu
147 65 70 75 80
149 Gly Leu Cys Glu Ser Ser Asp Phe Glu Cys Asn Gln Met Leu Glu Ala
150 85 90 95
152 Gln Glu Glu His Leu Glu Ala Trp Trp Leu Gln Leu Lys Ser Glu Tyr
153 100 105 110
155 Pro Asp Leu Phe Glu Trp Phe Cys Val Lys Thr Leu Lys Val Cys Cys
156 115 120 125
158 Ser Pro Gly Thr Tyr Gly Pro Asp Cys Leu Ala Cys Gln Gly Gly Ser
159 130 135 140
161 Gln Arg Pro Cys Ser Gly Asn Gly His Cys Ser Gly Asp Gly Ser Arg
162 145 150 155 160
164 Gln Gly Asp Gly Ser Cys Arg Cys His Met Gly Tyr Gln Gly Pro Leu
165 165 170 175
167 Cys Thr Asp Cys Met Asp Gly Tyr Phe Ser Ser Leu Arg Asn Glu Thr
168 180 185 190
170 His Ser Ile Cys Thr Ala Cys Asp Glu Ser Cys Lys Thr Cys Ser Gly
171 195 200 205
173 Leu Thr Asn Arg Asp Cys Gly Glu Cys Glu Val Gly Trp Val Leu Asp
174 210 215 220
176 Glu Gly Ala Cys Val Asp Val Asp Glu Cys Ala Ala Glu Pro Pro Pro
177 225 230 235 240
179 Cys Ser Ala Ala Gln Phe Cys Lys Asn Ala Asn Gly Ser Tyr Thr Cys
180 245 250 255
182 Glu Glu Cys Asp Ser Ser Cys Val Gly Cys Thr Gly Glu Gly Pro Gly
183 260 265 270
185 Asn Cys Lys Glu Cys Ile Ser Gly Tyr Ala Arg Glu His Gly Gln Cys

```

RAW SEQUENCE LISTING

DATE: 08/07/2002

PATENT APPLICATION: US/09/902,572A

TIME: 13:06:02

Input Set : A:\CORRECTED SEQUENCE LISTING FROM GNE.P1618P2C40.txt

Output Set: N:\CRF4\08072002\I902572A.raw

```

186          275          280          285
188 Ala Asp Val Asp Glu Cys Ser Leu Ala Glu Lys Thr Cys Val Arg Lys
189          290          295          300
191 Asn Glu Asn Cys Tyr Asn Thr Pro Gly Ser Tyr Val Cys Val Cys Pro
192 305          310          315          320
194 Asp Gly Phe Glu Glu Thr Glu Asp Ala Cys Val Pro Pro Ala Glu Ala
195          325          330          335
197 Glu Ala Thr Glu Gly Glu Ser Pro Thr Gln Leu Pro Ser Arg Glu Asp
198          340          345          350
200 Leu
203 <210> SEQ ID NO: 3
204 <211> LENGTH: 2206
205 <212> TYPE: DNA
206 <213> ORGANISM: Homo sapiens
208 <400> SEQUENCE: 3
209 caggtccaac tgcacctcgg ttctatcgat tgaattcccc ggggatcctc tagagatccc 60
210 tcgacctcga cccacgcgtc cgccaggccg ggaggcgacg cgccagccg tctaaacggg 120
211 aacagccctg gctgagggag ctgcagcgca gcagagtatc tgacggcgcc aggttgcgta 180
212 ggtgcggcac gaggagtttt cccggcagcg aggaggtcct gaggcagcatg gcccggagga 240
213 gcgccttccc tgccgcgcgc ctctggctct ggagcatcct cctgtgcctg ctggcaactgc 300
214 gggcgagggc cgggcccgcg caggaggaga gcctgtacct atggatcgat gctcaccagg 360
215 caagagtact cataggattt gaagaagata tcctgattgt ttcagagggg aaaatggcac 420
216 cttttacaca tgatttcaga aaagcgcaac agagaatgcc agctattcct gtcaatatcc 480
217 attccatgaa ttttacctgg caagctgcag ggcaggcaga atacttctat gaattcctgt 540
218 ccttgcgctc cctggataaa ggcacatgag cagatccaac cgtcaatgic cctctgctgg 600
219 gaacagtgcc tcacaaggca tcagttgttc aagttggttt cccatgtcct ggaaaacagg 660
220 atgggggtgg agcatttgaa gtggatgtga ttgttatgaa ttctgaaggc aacaccattc 720
221 tccaaacacc tcaaaatgct atcttcttta aaacatgtca acaagctgag tgcccaggcg 780
222 ggtgccgaaa tggaggcttt tgtaatgaaa gacgcacctg cgagtgtcct gatgggttcc 840
223 acggacctca ctgtgagaaa gccctttgta ccccacgatg tatgaatggt ggactttgtg 900
224 tgactcctgg tttctgcatc tgcccacctg gattctatgg agtgaactgt gacaaaagcaa 960
225 actgctcaac cacctgcttt aatggaggga cctgtttcta ccctggaaaa tgtatttgcc 1020
226 ctccaggact agagggagag cagtgtgaaa tcagcaaatg cccacaaccc tgcgaaaatg 1080
227 gaggtaaaatg cattggtaaa agcaaatgta agtgttccaa aggttaccag ggagacctct 1140
228 gttcaaagcc tgtctgcgag cctggctgtg gtgcacatgg aacctgccat gaaccaaca 1200
229 aatgccaatg tcaagaaggt tggcatggaa gacactgcaa taaaaggtag gaagccagcc 1260
230 tcatacatgc cctgaggcca gcaggcgccc agctcaggca gcacacgcct tcacttaaaa 1320
231 aggccgagga gcggcgggat ccacctgaat ccaattacat ctggtgaact ccgacatctg 1380
232 aaacgtttta agttacacca agttcatagc ctttgttaac ctttcatgtg ttgaatgttc 1440
233 aaataatggt cattacactt aagaatactg gcctgaattt tattagcttc attataaatc 1500
234 actgagctga tatttactct tccttttaag ttttctaagt acgtctgtag catgatggta 1560
235 tagattttct tgtttcagtg ctttgggaca gattttatat tatgtcaatt gatcaggtta 1620
236 aaattttcag tgtgtagttg gcagataatt tcaaaattac aatgcattta tgggtgtctg 1680
237 gggcagggga acatcagaaa ggttaaattg ggcaaaaatg cgtaagtcac aagaatttgg 1740
238 atggtgcagt taatgttgaa gttacagcat ttcagatttt attgtcagat atttagatgt 1800
239 ttgttacatt tttaaaaatt gctcttaatt tttaactct caatacaata tattttgacc 1860
240 ttaccattat tccagagatt cagtattaaa aaaaaaaaaa ttacactgtg gtagtggcat 1920
241 ttaaacaata taatatattc taaacacaat gaaatagggg atataatgta tgaacttttt 1980
242 gcattggctt gaagcaatat aatatattgt aaacaaaaca cagctcttac ctaataaaca 2040

```

RAW SEQUENCE LISTING

DATE: 08/07/2002

PATENT APPLICATION: US/09/902,572A

TIME: 13:06:02

Input Set : A:\CORRECTED SEQUENCE LISTING FROM GNE.P1618P2C40.txt

Output Set: N:\CRF4\08072002\I902572A.raw

```

243 ttttatactg tttgtatgta taaaataaaag gtgctgcttt agtttttttgg aaaaaaaaaa 2100
244 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gggcggccgc gactctagag tcgacctgca 2160
245 gaagcttggc cgccatggcc caacttgttt attgcagctt ataatg 2206
247 <210> SEQ ID NO: 4
248 <211> LENGTH: 379
249 <212> TYPE: PRT
250 <213> ORGANISM: Homo sapiens
252 <400> SEQUENCE: 4
253 Met Ala Arg Arg Ser Ala Phe Pro Ala Ala Ala Leu Trp Leu Trp Ser
254 1 5 10 15
256 Ile Leu Leu Cys Leu Leu Ala Leu Arg Ala Glu Ala Gly Pro Pro Gln
257 20 25 30
259 Glu Glu Ser Leu Tyr Leu Trp Ile Asp Ala His Gln Ala Arg Val Leu
260 35 40 45
262 Ile Gly Phe Glu Glu Asp Ile Leu Ile Val Ser Glu Gly Lys Met Ala
263 50 55 60
265 Pro Phe Thr His Asp Phe Arg Lys Ala Gln Gln Arg Met Pro Ala Ile
266 65 70 75 80
268 Pro Val Asn Ile His Ser Met Asn Phe Thr Trp Gln Ala Ala Gly Gln
269 85 90 95
271 Ala Glu Tyr Phe Tyr Glu Phe Leu Ser Leu Arg Ser Leu Asp Lys Gly
272 100 105 110
274 Ile Met Ala Asp Pro Thr Val Asn Val Pro Leu Leu Gly Thr Val Pro
275 115 120 125
277 His Lys Ala Ser Val Val Gln Val Gly Phe Pro Cys Leu Gly Lys Gln
278 130 135 140
280 Asp Gly Val Ala Ala Phe Glu Val Asp Val Ile Val Met Asn Ser Glu
281 145 150 155 160
283 Gly Asn Thr Ile Leu Gln Thr Pro Gln Asn Ala Ile Phe Phe Lys Thr
284 165 170 175
286 Cys Gln Gln Ala Glu Cys Pro Gly Gly Cys Arg Asn Gly Gly Phe Cys
287 180 185 190
289 Asn Glu Arg Arg Ile Cys Glu Cys Pro Asp Gly Phe His Gly Pro His
290 195 200 205
292 Cys Glu Lys Ala Leu Cys Thr Pro Arg Cys Met Asn Gly Gly Leu Cys
293 210 215 220
295 Val Thr Pro Gly Phe Cys Ile Cys Pro Pro Gly Phe Tyr Gly Val Asn
296 225 230 235 240
298 Cys Asp Lys Ala Asn Cys Ser Thr Thr Cys Phe Asn Gly Gly Thr Cys
299 245 250 255
301 Phe Tyr Pro Gly Lys Cys Ile Cys Pro Pro Gly Leu Glu Gly Glu Gln
302 260 265 270
304 Cys Glu Ile Ser Lys Cys Pro Gln Pro Cys Arg Asn Gly Gly Lys Cys
305 275 280 285
307 Ile Gly Lys Ser Lys Cys Lys Cys Ser Lys Gly Tyr Gln Gly Asp Leu
308 290 295 300
310 Cys Ser Lys Pro Val Cys Glu Pro Gly Cys Gly Ala His Gly Thr Cys
311 305 310 315 320
313 His Glu Pro Asn Lys Cys Gln Cys Gln Glu Trp His Gly Arg His

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/902,572A

DATE: 08/07/2002
TIME: 13:06:03

Input Set : A:\CORRECTED SEQUENCE LISTING FROM GNE.P1618P2C40.txt
Output Set: N:\CRF4\08072002\I902572A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; N Pos. 33,37,80,94,144,188

Seq#:26; N Pos. 21

Seq#:50; N Pos. 61

Seq#:113; N Pos. 1461

Seq#:131; N Pos. 1837

Seq#:174; N Pos. 1683

Seq#:175; Xaa Pos. 539

Seq#:206; N Pos. 973,977,996,1003